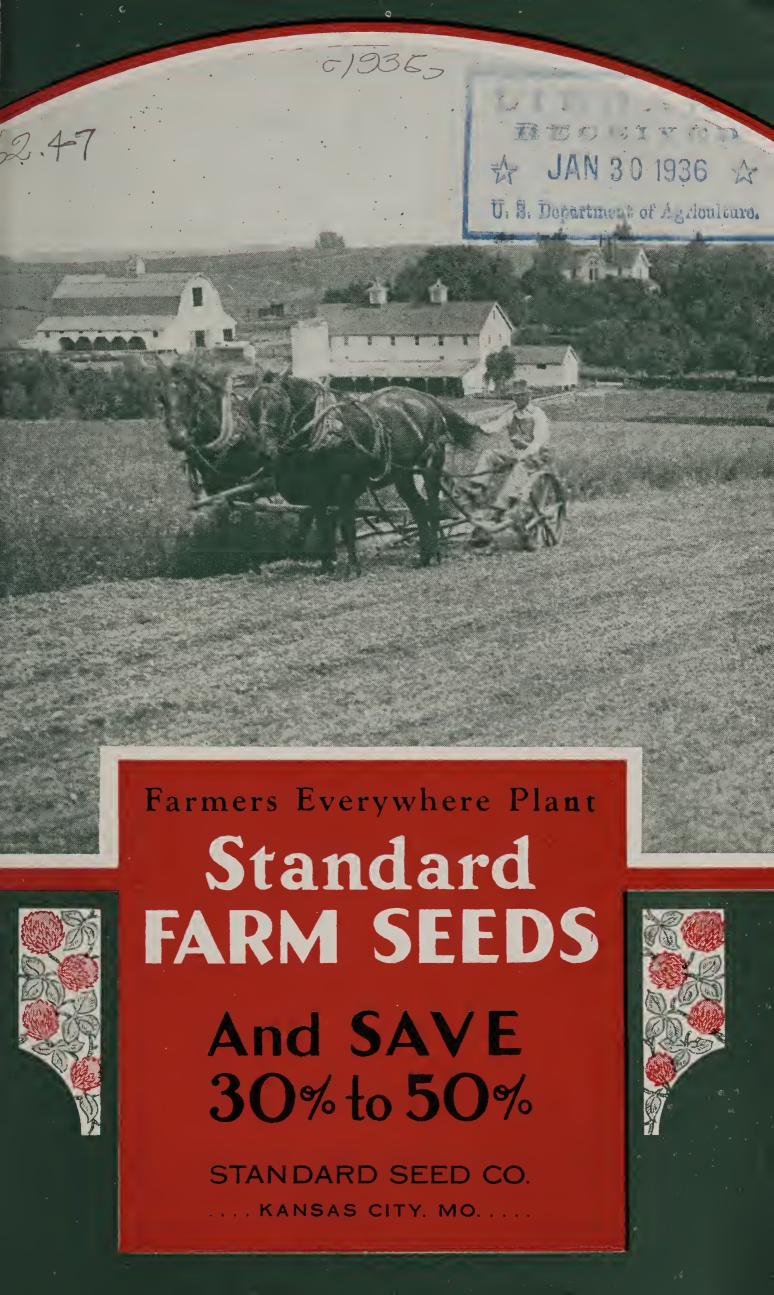
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.





Standard Farm Seeds...Gua



Fifty thousand farmers all over the country plant our Guaranteed Farm Seeds every year because they get good, dependable yields from Standard Seeds, and save from one-third to one-half on their seed cost. That's real saving, isn't it? Naturally, you wonder how this is possible, and you have a right to know. There are two reasons: First, we keep our overhead down to bedrock. Second, we are satisfied with small profits on large volume sales. In selling direct to

i buy all Standard Seeds we offer you.
. CHAS. LE CLUYSE,
PRESIDENT

We enjoy nation-wide sales

You know good seed when you see it—and we'll gladly send samples of anything you are interested in if you'll write us. Many of our best customers made our acquaintance in this way—and seeing for themselves the high standard of quality we deliver, depend on us for all their seeds.

Some seeds are scarce this year, but seldom are there enough good seeds raised to go around, and this year is no exception. Some seeds are already at a premium, and will probably advance steadily as available stocks are reduced. We urge every farmer who wants to be sure of good seed for spring to place his order at once. Our stocks on most seeds will supply early demand, but we may be sold out of best grades early. We can serve you better, and you can be sure to get our best seeds by ordering early.

In a recent check of last spring's orders, we find shipments to every state in this great country of ours—so In claiming a nation-wide following among planters, we are simply stating the facts. Naturally, it is gratifying to us to be of service to farmers over such a vast territory—but of more importance is the fact that it should impress you with the values we deliver in the seed bag—or such a wide distribution could never have been built up. We invite you to depend on us—this year—when we can save you real money—for at least a part of your seed requirements.



KNOWN

HARDI-KAN

SAVED \$2.50 Per Bushel on Alfalfa.

SEED IN THIS BAG WAS GROWN IN NORTHERN KANSAS

> AND CAREFULLY SELECTED FROM CHOICE FIELDS

I bought three bushels of your Extra Fancy Alfalfa seed last August at a saving of \$2.50 per bushel. I sowed the seed August 18th and will say August 18th and will say I never saw a better stand. Having bought seeds from you before at a saving, I feel that I need not look further for seeds in the future. The prices are right and the quality equal to any of the seed houses I have ever dealt with.

A. J. HOLADAY, Edgerton, Mo.

Edgerton, Mo.

A TAG ON EVERY BAG

Farmers everywhere prefer to buy alfalfa in sealed branded bags. In addition to this, we furnish tags on every bag of HARDI-KAN Alfalfa. This is a certain protection, and a guarantee against misleading information.

EVERY LOT OF STANDARD SEEDS TESTED FOR QUALITY AND **GERMINATION**

Seed testing for vigor and germination are all-important. They indicate to a certainty what the buyer can expect from the seed. That's why we are so thorough and use the best known methods for testing every lot of seed. You can absolutely depend on every grade we offer as being exactly what we represent.

You take no risk when you buy seeds of known origin.



Alfalfa Needs Fertile Land



PLANTERS THE COUNTRY OVER PLANT STANDARD ALFALFA SEED

alfalfa needs FERTILE LAND

It is also hard to start alfalfa on poor soils. Land lacking in fertility should be well manured. Good corn land is good alfalfa land.

• when to cut

When new shoots begin to grow on the lower part of the stems, or when first blossoms appear, you can cut your alfalfa. Or, you can wait until plants are in full bloom. Let your best guide be the growth of the new shoots, since weather conditions sometimes cause the plants to bloom but little, or not at all. However, it is well known that, even with one less cutting, the full bloom stage provides a larger total yield of hay, plus keeping the stand in better condition. The number of cuttings depends upon climatic conditions. About twice a season is considered safe in the middle west and northwest states.

alfalfa must have MOISTURE

By all means, do not sow alfalfa when the soil is deficient in moisture. The result, in such cases, will prove disastrous.

when and how to sow

To a great extent, the time to sow alfalfa depends upon local conditions. Any time after the seed bed can be put into condition during late spring or summer, you can sow alfalfa. Late summer plowings must be made early enough to permit the plants to become established before frost. Eight weeks is usually enough. Generally speaking, it is better to sow alfalfa without any nurse crop.

Sow it with a grain driller with seeder attachment, with a special alfalfa drill, or with a wheelbarrow seeder or a hand seeder. Cover it to bring into contact with the soil moisture.

SMALL INOCULATION COST

Lack of Inoculation has caused many alfalfa failures. The cost—about 10 cents per acre—is too small to disregard. Sweet Clover will not inoculate or prepare soil for alfalfa unless the Sweet Clover is inoculated first. (See page 18.)

curing for best results

An effort should be made to get the hay into stack or mow with the largest possible proportion of leaves, since considerable of the feeding value is contained in the leaves. The less you handle the hay after it begins to dry the more it is worth. Rake hay before becoming brittle and cure in the cock unless weather is very uncertain, and do not put in barn until well cured. If stacked in the open, build stacks carefully and make as large as possible.

do not kill its start

Do not pasture your alfalfa the first season, and do so only lightly the second. Don't let stock graze it down so closely as to injure crown or new shoots, nor turn stock into it when ground is wet or frozen. Spring sowings usually may be cut once with safety so long as the cutting can be made 8 to 10 weeks before first frosts are expected.

• fighting the CRAB GRASS

A cultivation after each mowing will help keep the grass down and will not injure the alfalfa in the least. Use a spike-tooth or springtooth harrow, but not a disk harrow. Do not cultivate at all as long as stand is satisfactory and plants are growing good.

•be sure to see enclosed PRICE LIST •it's part of CATALOG

alfalfa not suited to sowing in mixtures

Because of its ability to produce two or more cuttings in a season, alfalfa is not generally well suited to sowing in mixtures with grasses In humid districts and clovers. where more or less difficulty is encountered in curing alfalfa the presence of some grasses may be of appreciable value in hastening the process, and, furthermore, some feeders prefer mixtures to alfalfa alone. Grasses are sometimes sown with alfalfa for pasturing to reduce the danger from bloat. Timothy is probably used in mixture with alfalfa more than any other grass because of its wide popularity. is used to some extent in the East and to a considerable extent in parts of the Northwest, where alfalfa is grown under irrigation. There are quite a number of farmers who make a regular practice of sowing a little timothy with alfalfa on the theory that when the alfalfa dies out the timothy will fill up the vacant spaces and check the growth of the weeds. Orchard grass and meadow fescue are better suited for sowing with alfalfa than is timothy, as they mature more nearly with it.

I am sending you an order for thirteen bushels of Northern K ans a s "Prime" Alfalfa. My neighbors have seen my good stands for the last three years and are saving some money, too, by ordering from the Standard Seed Company.

ALVA JOHNSON, Fairmount, Ind.

Route No. 1

Principal Varieties of ALFALFA



There are only a few strains equal and none exceed Grimm Alfalfa in hardiness. It is the safest type to sow wherever there is trouble from winter killing. Our stocks are produced in the states of Idaho and Utah and each lot is specially guarded under the authority of state officials and shipped in sealed bags. It does not cost any more to sow the Grimm variety, as it requires less seed to an acre. We recommend sowing from 10 to 12 pounds to an acre.

DISTINCTION BETWEEN GRIMM and COMMON ALFALFA

There is a good deal of misunderstanding about the points of difference between these two alfalfas. No one character may safely be used as a distinguishing mark of either. Except in color of blossom, an individual plant of Grimm may grow and look exactly like Common, and vice versa. In general, however, the differences are as follows:

- 1. Grimm has a variegated; Common, a purple blossom.
- 2. Common grows a little taller as a rule and, where hardy, produces more hay.
- 3. Grimm is hardier than Com-
- 4. Grimm, speaking in a very general way, has a somewhat spreading or "sprangly" root system, while Common tends to produce a deep "tap" root. Too much

reliance cannot be placed on these characteristics, however, as under certain soil conditions Grimm will grow a root system of the Common type, and vice versa. There is much variation in the root character of individual plants from the same strain.

5. Again speaking very generally, Grimm has a lower set crown than Common alfalfa. Local conditions affect this also, and it cannot be relied upon to distinguish the two strains.

The superior hardiness of Grimm is often attributed to its spreading roots or low-set crown. It is probable that both of these characters have some effect on hardiness, but more important than either is the fact that hardiness is bred into and has become an inherent character of Grimm.

We list only such varieties of alfalfa as are known to be good producers, and we recommend our HARDI-KAN brand, in sealed bags, as the best your money can buy. Try it this year. You'll be well pleased when you examine the seed we send you, and better pleased when the growing season is over, and it has produced the growth you desired.

Common Alfalfa

The Hardy Northwestern and Kansas grown seeds are the principal varieties and most generally used. They are both extra hardy types and most suitable for any locality. In some sections these varieties will do as well as the Grimm.

CLIMATE IS THE MOST IM-PORTANT FACTOR: In the case of certain crops, especially alfalfa, claims have been made that seed produced on so-called dry land is hardier than seed grown on irrigated land. The trials of the U. S. Dept. of Agriculture indicate that there is very little, if any difference, seed from irrigated land producing fully as well as seed from dry land. Pedigree and climate are the only important factors in producing seed hardiness.

Dakota No. 12

This is considered to be a very hardy type of alfalfa; however, we believe that our Northwestern common is fully equal to it in hardiness and it can be bought at a much lower price. Dakota No. 12 derives its name from seed that comes from fields that have grown in the Dakotas for 12 years or more. There is no difference in the type between the Dakota No. 12 and our Northwestern grown. common About the only difference is the variation in price. If you want a hardier type than the common, we would only recommend the Grimm. The cost would be about the same as it requires less seed to sow an acre.



Common Alfalfa

excerpts from planter letters who use our alfalfa

This is a photo of my forty acres of alfalfa. I purchased the seed from you and this field is now five years old.

H. M. SHIVELY, Benedict, Kan.

I have used your alfalfa and timothy seed for several years and they have always been satisfactory.

H. K. EBY,
Ketchum, Okla.

Dear Sirs: I am in receipt of your letter of the 7th. In reply will say that the seed that I bought from you in the last four seasons, Alfalfa, Milo Maize, Red Kaffir, have all been very good, well cleaned and grew well. The Red Kaffir this year made a wonderful crop.

M. E. GRAY, Belvidere, Neb.

Field Seed Reference Table on back page of this book should be preserved by every planter.

KOREAN LESPEDEZA



FIELD OF KOREAN LESPEDEZA

The FINEST OF LEGUMES

For Reclaiming Worn Out Soil

It can be grown as far north as Michigan and southwest to Oklahoma. It is an annual, but once seeded it will reproduce itself indefinitely on hay fields, pastures or waste lands. It is eradicated by the cultivation of a single succeeding crop. About 400 to 500 pounds of seed per acre may be expected in a fair season from a good broadcast stand. The se plants are not dependent upon lime. They pry loose necessary mineral elements from hard and compact soil not available to ordinary plant life.

KOREAN LESPEDEZA

Drought Resistant---Deep Rooted

While severe droughts will curtail growth of plants for pasturage and hay, yet Lespedeza will withstand droughts destructive to all other legumes and thrive on sandy soil too dry for other clovers.

Dependent upon latitude, growth begins in April-May. In June-July

the crop is ready for pasturage and in August-September for hay, and in September-October for seed. Korean variety matures two to three weeks earlier than any other variety. The growth continues until heavy frost.

EXCELLENT for Grazing

Reported from all sections. The Missouri Experiment Station reported in 1927 that a seeding of Korean Lespedeza in wheat was grazed after the grain was harvested from early in August. A permanent pasture with long grazing season can be secured by seeding a mixture of early maturing grasses such as Orchard Grass and Red Top with the later maturing Lespedeza. It is at its best in the summer when other grasses and clovers are dormant. No bloating of live stock has been heard of.

BEST of ALL Soil Builders

Lespedeza outranks all other legumes. Poor, sour soil, void of humus and dead to forage crops is not beyond the reach of Lespedeza. Alfalfa and Sweet Clover are helpless on poor, acid soil. Such soil must be reclaimed, usually at great expense, before Alfalfa and Sweet Clover can do their beneficent work. Lespedeza will start at the bottom and do the reclamation work. No lime or careful and expensive preparation of seed bed, no failure from drought and no choking out by weeds or grass.

When and How to Seed

When broadcasting is evenly done in early spring (March-April, depending on latitude) on ground well cracked or pitted from freezing. When so planted, do not attempt to cover the seed and plant late enough to avoid injury by frost to young plants. Under other conditions, the soil may be harrowed either before or after seeding. A disk drill may be used, but the coverage of the seed must be very slight, otherwise they will not germinate. They may be seeded on

any small grain (serving as a nurse crop against weeds) and both crops secured on the same land in one season. Lespedeza will reseed itself in subsequent years. Thin sowing of five pounds per acre will produce a heavy crop of hay the second year, but we believe it more satisfactory and economical at first to sow 15 pounds of seed per acre and thereby secure a full hay crop, or seed for harvest, the first year the seed is sowed.

Enclosed find my check for \$..... for 100 pounds of Korean Lespedeza seed. I had good success with the seed I purchased from you last year.

PORTER J. SMYTH, Chariton, Iowa

I received my order of grass seeds and can say I am well pleased with them. They sure are nice seeds. I saved \$22.96 on my seeds.

Route 2 MRS. GRADIE BARKER, Somerset, Ky.

Dear Sirs: Please send me your 1935 catalog. I had good luck last year. I think every seed I bought from you came up. I have four acres to sow this year in Lespedeza. I will need 100 pounds—I like to sow 25 pounds to the acre.

C. G. JACKSON,

Box 124

Glen Morgan, W. Va.

LESPEDEZA GROWS UP NORTH

We receive a great many letters asking questions like this: "Will Lespedeza grow up north?" This letter from Bangor, Mich., answers this question.

I tried out the sample of NORTH-ERN KOREAN LESPEDEZA you sent me last year (1934). It grew fine and I was well pleased with it. Therefore, I am enclosing an order for 250 pounds, which ship promptly.

LORING SWANK,
Bangor, Mich.

CLOVER SEED



The most important leguminous forage and soil improving crop in the north-central and eastern states. It ranks next to alfalfa in feeding value. It will grow on any well drained fairly rich soil that has plenty of lime in it. Without lime or on hard, run-down land in which the organic matter has been exhausted by bad cropping, it will not thrive.

MEDIUM RED CLOVER

The most common method of seeding is on winter grain, but it is also seeded with spring grain. Late summer seeding is successful in much of the southern and eastern part of the clover area. Red Clover is most often seeded with timothy, though sometimes with other grasses. With timothy, the hay of the first year's crop is mostly clover; the second year, the timothy is most heavy and after that the

clover largely disappears. Of all the crops, oats is the most harmful, since its heavy growth makes a shade too dense for the young clover. When seeded on wheat the seed bed is usually in fair condition and the clover may be sown on the ground when it is still freezing and thawing, as these processes will help to work the seed into the ground.

sow HALF your seed in February

One successful practice is to sow half the seed in February. If there is a good stand, no more seeding is necessary; if not, the remainder of the seed is put on in April. When seeding is delayed until the surface of the ground dries, it is a good practice to harrow before and after seeding. The harrow, if set to work about an inch deep, will not hurt th wheat. Or the seed may be put in with a drill. This latter is a better practice, since less seed is needed and it can be put in at a fairly

uniform depth. It is well to seed the clover crosswise of the wheat rows, which are best run north and south, as this enables the young clover to get the maximum light.

HOW MUCH TO SOW PER ACRE

If the clover seed is sown broadcast, 10 to 15 pounds per acre are used, but if drilled, only 6 to 8 pounds are needed. There are about

250,000 Red Clover seeds in a pound and evenly scattered on an acre one pound will leave five seeds on every square foot, enough for a good stand if every seed makes a plant. The extra seed is merely insurance, but this is valuable insurance. The condition of seed bed and weather are perhaps never ideal, and allowance must be made for many of loss. Therefore, the chances more seed used up to, say, pounds per acre, the better chance for a stand. Too little seed is used more often than too much, and unless seed is extremely high the extra dollar or so spent per acre to insure a stand is money well invested.

SEEDING with Spring Grain

The clover is put in at the same time as the grain, but the grain is planted at a greater depth than the clover. On heavy land, should be placed not more than an inch deep, but on light soils 11/2 to 2 inches. The nurse crop especially, if it be oats, should be seeded at only one-half to two-thirds usual rate if the clover is to have a good chance for success. stubble of grain also serves as a winter protection to assist in catching and holding the snow which otherwise might drift from the field and render the clover plants more likely to be winter killed. Where a stand of clover is badly needed and hard to get, it is better to prepare a good seed bed and sow clover alone.

TIME of CUTTING

If the usual practice is followed and the clover sown with a grain nurse crop, it begins to develop rapidly after the grain is cut. If the weather is especially favorable, one cutting of hay may sometimes be

made the first season. As a rule, however, it is best to only clip back the growth to check the development of the plants. It is not advisable to pasture spring seedings the first season with sheep or hogs as they are likely to injure the young plants. Light pasturing with cattle does little or no harm. The second season usually yields two crops; both may be cut for hay, or the first for hay and the second for seed. The best hay is obtained by cutting at the period of full bloom. Earlier cutting yields hay which is much more difficult to cure to good quality, but is sometimes practiced when the second crop is to be allowed to stand for seed.

SUCCESSFUL CURING PROCESS

The secret of success in curing clover hay lies in tedding frequently before the plants become too dry, so as to reduce the moisture content as rapidly and evenly as possible. As soon as the leaves show signs of wilting in the swath, rake into windrows, and bunch into cocks.

CROWING of SEED

Weeds make it difficult to get a crop of Red Clover; they decrease the yield and decrease the value of the hay. In many sections where clover seed production was formerly a profitable enterprise, weeds have become so prevalent as to endanger the industry. This has been due largely to the sowing of home grown seed not expertly recleaned. If you intend to harvest a crop of Red Clover seed, it is of special importance that you start with the very best recleaned seed. The demand for high grade domestic Red Clover seed is always good.

KANSAS CITY, MISSOURI

SWEET CLOVERS



BIENNIAL WHITE BLOSSOM

The White Blosson Biennial variety is the most common type and in the greatest demand. It will grow in almost any climate and on almost any type of soil, thriving on land too poor for Alfalfa or Red Clover. It is a biennial, disappearing at the end of the second season, unless allowed to go to seed and reseed itself.

White Blossom fits very well into the rotation scheme and may be sown with corn at the time of cultivation or following a crop of winter grain.

As hay or green forage, it ranks with alfalfa in feeding value. At first stock seldom like it, but soon develop a preference for it, providing it is cut before it reaches the blossom stage when it becomes woody. On account of its heavy and deep spreading root system and its ability as a nitrogen gatherer when inoculated, as a soil improver, it stands at the top of the list for use on poor soil.

SOIL and SEEDING

Although Sweet Clover will grow on thin, poor soil, deficient in organic matter, even thrive on sand, it does require lime.

Before attempting to grow a crop of Sweet Clover for any purpose, the soil should be tested and lime applied if needed. Like other Legumes, it does not store nitrogen unless it is inoculated with the right strain of bacteria, so Sweet Clover should always be inoculated before it is sown.

If seeded alone, as is the usual practice, the land should be prepared in the same way as for any standard farm crop. The seed may be sown like Red Clover with winter or spring grain, or alone, either in early spring or mid-summer. Sow fifteen to twenty pounds of seed per acre.

FOR PASTURES

It provides a large quantity of forage of high feeding value. It reaches the grazing stage quickly, and is benefited by close pasturing. If sown alone in early spring, the pasture will be ready about June 1st. The more stock you turn in on it the better, for close grazing encourages the production of a constant supply of small, tender shoots. If the plants grow so fast that they cannot be kept pastured down they become coarse and unpalatable; should this occur, it is best to go over the field with a mower, setting the knife to cut about 8 inches high. Take stock off about six weeks before frost in the fall of the season. The following spring the second year's growth comes on very quickly and stock may be turned in as soon as it is well under way. If a crop of hay or seed is wanted, do not pasture after the middle of June or the 1st of July. If it is desired to have the Sweet Clover reseed itself, remove the stock about two months before frost.

GROWING FOR HAY

First, the new growth of Sweet Clover comes, not from the crown of the plant as in Alfalfa, but from the side shoots from the lower part of the main stem. For this reason whenever a second growth the same season is desired, the first cutting must be made high enough to leave six or eight inches of stem to produce side shoots. For a good quality of hay, Sweet Clover must be cut early, before the plants become tough and unpalatable. When sown in spring, Sweet Clover makes one cutting of hay the first season. Since the first season's growth does not tend to become so tough as the second season's, this cutting may be delayed until the plants have grown as big as they are going to. You can tell when it is time to cut by watching for the appearance of crown buds which come out shortly before growth ceases. Remember, the mower knife should be set to cut about six inches above the ground or no further growth will result.

Sweet Clover hay should be handled and cured the same as alfalfa.

TO BUILD UP THE SOIL

When grown for this purpose, Sweet Clover is usually sown in mid-summer, either in corn or following grain, and plowed under the following spring. By this time it will have made a heavy root growth, and, if inoculated at time of sowing, will have accumulated a quantity of nitrogen. Both roots and tops decompose rapidly when plowed under.

GRUNDY COUNTY SWEET CLOVER

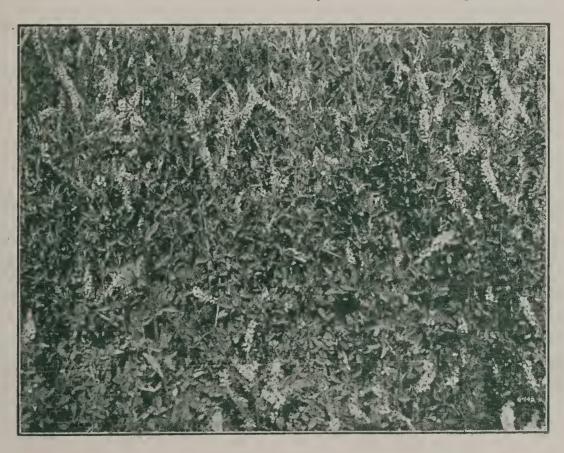
This is a variety of biennial that is distinctly different from the common White Sweet Clover. It grows only 3½ to 5 feet high, has somewhat finer stems and matures about two weeks earlier. It has no advantage over the common type for pasture or plowing under. When Grundy County is used, the second crop may be plowed under in ample time to put the land in alfalfa that fall. The seed is very small, therefore it does not require as much to sow an acre as to sow the common type. We recommend sowing about 12 pounds to an acre.

YELLOW BIENNIAL SWEET CLOVER

This variety is a biennial type like the common White Blossom and is handled in the same way. It is not as coarse as the White, therefore, it is inferior for pasture or soil improvement. It makes a smaller, finer growth, matures and produces a better quality of hay.

HUBAM or ANNUAL WHITE SWEET CLOVER

This is an annual type of Sweet Clover making its entire growth the first season, maturing, seeds, and then dies. As a soil builder, it has no equal. It can be sown in the spring with small grain and plowed under for fertilizing the same fall. For pasture, however, it is not to be compared with the White Biennial type. Experts say that honey produced from it is the best of any. Sow about 15 pounds per acre.



MAMMOTH RED CLOVER

This differs from Medium Red Clover in being about two weeks later to mature and in being under similar conditions larger and coarser. Only one crop of Mammoth Clover can be harvested each year, since it does not recover quickly. On low ground, the stems are likely to become woody. Its coarseness, however, makes it less valuable for hay. It is preferred for soiling and plowing under.

ALSIKE Clover

This is also known as Swedish Clover. It is one of the hardiest varieties known as it is adapted to most any kind of soil. It is a perennial and does not winter kill very easily. It will do better on moist, wet soil, especially where it is subject to overflow. Alsike Clover is not as coarse as Medium or Mammoth Red Clover, it being fine stemmed, leafy and easily cured.

When Grown for Hay

Alsike is generally mixed with Red Clover and grasses such as Timothy and Red Top; on account of its spreading growth it is liable to lodge if sown alone. When sown in mixtures, the stronger growing grasses and clovers support the Alsike and the hay produced is of a finer quality. The common mixture is two pounds of Alsike, eight of Red Clover and four of Timothy to the acre. When grown alone, six to eight pounds of seed should be sown to the acre.

PASTURE

Alsike is highly esteemed for pasture on account of its high feeding value. Grazing can begin as soon as the plants have made a good start and it should never be delayed long enough to let them blossom.

WHITE DUTCH

CLOVER

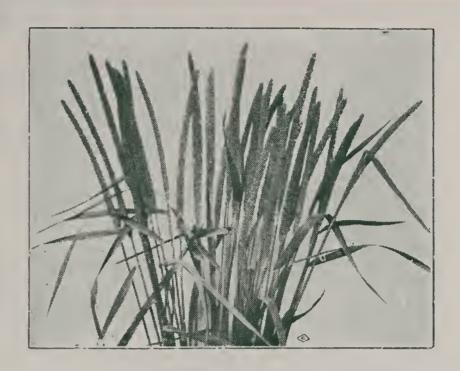
This grows in practically every part of the United States where soil conditions are suitable. It is commonly known as "White Dutch" to distinguish it from "White Sweet Clover." It is not adapted for hay, but is used chiefly for pastures and lawn purposes. It makes excellent pasture because it is high in protein contents and is relished by stock. For pasture purposes, it is very seldom sown alone except on old pasture land already well provided with grass, in which case it is scattered well on top of the soil in early spring. It thrives under trampling and does not cause bloating. It should be sown at the rate of six pounds per acre. If wanted in lawns, the seed is best sown separate from the grass mixture.



TIMOTHY USEFUL AND Grass

Of wonderful nutritious value and unusually productive, the seed being very small and produced in great abundance, makes it the most economical of grasses. Extremely hardy; seldom winter-kills and stands heat and cold equally well. Sow 10 to 12 pounds to the acre.

Although Timothy contains only a moderate amount of nutrients, it is a very valuable feed because of its palatability, its laxative effect and the fact that it will not injure stock, regardless of how much is eaten.



Timothy belongs in cool and temperate climates. Can be grown as far north as the Arctic Circle. Because of a rather weak and shallow root system, it must have moisture in fair supply and within easy reach. Rich bottom lands, therefore, and the heavier types of soils, produce the best Timothy crops. Will not do well on thin or sandy lands. Prefers a sweet soil, but does not need as much lime as clover.

Red Clover and Timothy Mixed

It is very often advantageous to seed Red Clover in a mixture with Timothy. It will usually insure a better succession of good pasturage than would the use of a single crop. The practice of adding Alsike Clover to this mixture is increasing. Whenever any difficulty is experienced in getting a stand of Red Clover, it is a good plan to replace half the Red Clover with an equal weight of Alsike Clover seed. While Alsike Clover will not yield as heavily as Red Clover when the latter does well, it is more certain to catch on soils which are poor in lime. In the winter Wheat section, except in the South, the Timothy is seeded with the Wheat and the Clover on Wheat the next spring. In the spring Wheat section, the Timothy is seeded with the Red Clover at the same time the Wheat is sown, mixing about 10 to 12 pounds of Timothy with eight of Red Clover or of Red Clover and Alsike Clover to an acre.

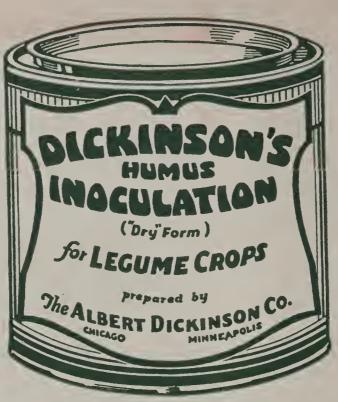
Timothy and Alsike Mixed

The mixtures we offer of these two desirable grasses are blended in such proportions as years of experience have shown to give the most desirable combination. Since Alsike reaches the best state for hay at about the same time as Timothy, this mixture is preferred by many farmers to the combination of Red Clover and Timothy. One great advantage of this mixture is that they are both perennial and make a better combination than most any other two. It requires 12 pounds of this mixture to sow an acre.

KANSAS CITY, MISSOURI

ALL LEGUMES SHOULD \mathbf{BE} INOCU-LATED

"DRY"



MAKES BIGGER AND BETTER **STANDS**

FORM

Now you can inoculate your analta, clover, soy beans or other legume seed without the use of water and still be sure of a growth of soil-improving root-nodules as full and vigorous as was formerly possible to obtain only by the use of bottle or "jelly" type cultures.

Dickinson's New Humus Inoculation has been perfected after careful study and experiment in the country's largest commercial soil basteriological laboratory. Each culture contains millions of vigorous root-nodule bacteria living in a specially blended humus substance which can be mixed with the seed dry, just as it comes from the can. Every can contains plenty of culture material to fully inoculate the quantity of seed for which it is intended.

Buy your Dickinson's Humus Inoculation when you buy your seed so

Buy your Dickinson's Humus Inoculation when you buy your seed so as to be sure to have it at hand when you are ready to sow.

Full directions are printed on the label. No skill or experience is required to get good results with Dickinson's Humus Inoculation. It is safe and easy to use and produces sure results at a cost of only a few cents per acre. Only a few minutes are required to inoculate the seed which can be sown immediately. Many growers now prefer Dickinson's Humus Inoculation because of its handy form and ease with which it is used.

- 1 insures Better Stands. The legume crops require plenty of nitrogen in their early growth. Inoculation makes an ample supply available.
- 2 insures Bigger Crops. Inoculation by increasing available plant food promotes the most vigorous growth and produces bigger crops.
- 3 Increases Value of Crop for Feeding. By feeding nitrogen to plants, their protein content and, hence, their feed value, is greatly increased.
- 4 Adds Fertility to Soil. Inoculation provides plenty of nitrogen for the crop and, when it is turned under, adds to the soil an average of 100 lbs. of nitrogen per acre.

For All Clovers and Alfalfa

1/2	bushel	size	inoculates	30	lbs.	seed	.\$0.30
1	bushel	size	inoculates	60	lbs.	seed	50
21/2	bushel	size	inoculates	180	lbs.	seed	. 1.00
5	bushel	size	inoculates	300	lbs.	seed	. 1.75

For Soy Beans, Cowpeas, Lespedeza. Vetch and Other Peas and Beans

1	bushel	size	inoculates	60	lbs.	seed\$0.30)
2	bushel	size	inoculates	120	lbs.	seed)
5	hughel	9170	inoculates	300	lhg	seed 1.00)

ALWAYS STATE KIND OF SEED YOU WISH TO INOCULATE.

VETCH The Hardiest Variety

Winter, Sand or Hairy VETCH

This is the hardiest and most suitable variety for the central and northern states. When sown in the fall, it lives through even the severest winters and completes its growth the following spring, which makes it our best leguminous winter cover and green manure crop.

It thrives better than any other legume on the sandier type soils.

It is advisable to sow one of the small grains with it to furnish support for the vines, as the Vetch grows better if the vines are kept off the ground and the combination gives a larger amount of green manure. Rye is commonly used and seems to be the most satisfactory to grow with Vetch. Sow thirty pounds of Rye and thirty pounds of Vetch per acre.



COWPEAS



Cowpeas, being legumes, have the same ability to improve the soil as do clovers and alfalfa. They are easily planted, easily grown, make good pasture, can be fed green, make fine hay and excellent ensilage, especially when planted with corn. The decaying roots and stems add food value to the soil and the whole vines are often turned under for fertilizer.

Whip-Poor-Will Legume has many

uses

This is a soil enriching legume about which too little is known. The Whip-Poor-Will is an early variety, maturing in about 90 days. Cowpeas, ripe, are valuable either as human food or food for stock. The vines make the finest kind of hay green, and are eaten by stock; are an excellent silo filler and may be pastured by hogs or cattle. Do not plant until the ground is warm. For pasture, hay or soiling, broadcast or drill with a grain drill at the rate of one bushel per acre. For seed sow in rows 36 inches apart and cultivate.

All LEGUMES Should Be Inoculated SEE PAGE 18

KANSAS CITY, MISSOURI

SOY BEANS



Give Quick Results in Soil Improvement

For soil improvement, where quick results are wanted, the Soy Bean is the most useful legume crop. In order to add nitrogen to the soil it must, of course, be inoculated; otherwise, it impoverishes the soil even more rapidly than corn. However, if inoculated with the right bacteria, it produces in a single season a large, spreading root system covered with big nodules.

Soy Beans fit into the rotation as a cultivated crop, a grain crop or a hay crop. As a cultivated crop, they are usually grown with corn, this combination making it possible to grow a legume for soil improvement on every acre every year, the corn and Soy Beans being followed by small grain with clover.

Preparing and Seeding SOY BEANS

It is not safe to sow until the same time or a little later than

corn. If seeded with corn, but sown separately, figure on sowing one Soy Bean grain for each grain of corn. When grown alone, Soy Beans may be sown with a grain drill or corn planter, or broadcast. If grain drill is used, some of the spouts may be stopped up, the number of spouts closed depending on the desired space between rows; and this again depends upon the kind of equipment available for cultivation.

Soy Beans Make Excellent Hay

Soy Beans are generally grown alone for hay. Seed solid or in rows. They are usually cut with a mowing machine about the time the pods begin to fill. After this, they are left on the ground until wilted, then raked up and placed in tall, loose cocks for about a week.

Varieties of SOY BEANS

Soy Beans for Ensilage

For this, grow Soy Beans either in rows with the corn or separately as for hay and mixed with corn. Figure on about one load of Soy Beans to three loads of corn, when run through the cutter into the silo. They may be allowed to fully mature, even dry, before they are cut if used this way.

For Hogging Down

In many northern states, Soy Beans are being grown more and more with corn for hogging or sheeping down. For this purpose, they may be either broadcast in the corn at time of last cultivation or sown with corn the same as for ensilage.

As a Catch Crop

Soy Beans are ideal as a catch crop—is often called the "Renters Clover," because it is the most valuable legume maturing in a single season. Can be put on the land when clover fails and will fill the purpose of the clover in the rotation.

VARIETIES of SOY BEANS

Manchu. Matures in about 110 days and is the most popular early variety. Plants erect and bushy, producing large crops of dry forage and seed. Seed light yellow with a black scar. Highly recommended.

Midwest or Northern Hollybrook. Matures in 115 to 120 days. The most popular variety for hay, seed



MANCHU SOY BEANS

or ensilage wherever the seasons are long enough to mature it. Plants large and erect. Seed yellow with light brown blotch. Should not be confused with the ordinary or Southern Hollybrook which is much later.

Virginia. Matures in about 125 days. Coarse, tall and slender, with a tendency to vine if sown with corn. Does well on poor ground. A good variety for hay or ensilage. Seeds brown.

Wilson. Commonly called "Black Wilson" because the seeds are pure black. Matures in about 120 days. Plants tall and slender, ideally suited for hay and widely grown for that purpose; also for ensilage, with corn, in the southern and eastern sections of the corn belt.

Illini. Matures in about 105 days. Similar to Manchu for hay purposes. From the standpoint of a "combination hay and seed bean" it has an advantage over the Manchu

SUDAN GRASS

FOR HAY AND PASTURE



Best Time to Sow is Two Weeks After Corn

Sudan Grass is a quick-growing annual grass requiring a little longer growing season than the millets but attaining a greater height and producing a considerably heavier yield of forage. Throughout the corn belt it is the most valuable grass catch crop, used for hay, pasture and occasionally for silage. It may be grown wherever Soy Beans thrive. It requires a fairly rich. loamy soil, but is quite resistant to drought and is the most dependable pasture crop during dry weather. As hay it is fully equal to Timothy and is relished by stock.

The seed should not be sown until the soil is thoroughly warm; it is safest to wait until about two weeks after corn planting time. Good results are obtained from seedings made any time from then on up to the first week in July in the general latitude of the corn belt.

SUDAN GRASS for HAY

The seed may be broadcast or drilled. The crop may be cut any time after it has attained a height of about 3 feet up to the stage when the seed is in the "milk." If cut early the hay is more easily cured and a second and even a third cutting may sometimes be obtained. Late cut hay, on the other hand, is fully as nutritious and, even though a second growth is not secured, the total yield is fully as large. Best results, all things considered, seem to be secured by cutting about the time the first heads appear, which stage is reached 60 to 80 days after sowing. As a practical consideration, the crop may be cut whenever weather conditions and other work on the farm make it convenient. If the hay is well cured, there is no danger from feeding it to any kind of stock. It should be allowed to stand in cocks long enough for the stems to become thoroughly dry; the stems are very juicy and take longer than the leaves to cure.

SUDAN GRASS for PASTURAGE

As an emergency pasture during dry spells, Sudan Grass has few equals. Stock may be turned in as soon as the plants are 2 feet high. Where it is practicable to do so, the field may be divided in half and the halves pastured alternately, changing every two or three weeks. Sudan Grass is an excellent milk producer and will support from one to three cows per acre, depending on conditions, for two or three months. It is not advisable to pasture cattle on Sudan Grass which has been, as rarely happens, injured by drought, on account of danger of poisoning. There is no danger of poisoning horses, sheep or hogs.

For pasture purposes, the seed is broadcast or sown with a grain drill.

SUDAN GRASS for SILAGE

Sudan Grass silage is about equal in feeding value to corn silage. However, on account of the ease with which Sudan Grass may be cured for hay or fed green, it is doubtful if it will ever be widely grown for ensilage purposes. Best silage crops are secured by drilling the seed in rows wide enough apart for cultivation, and giving the same frequent, shallow, level cultivation as for corn.

SUDAN GRASS for SEED

When grown for seed, highest yields are secured by sowing in rows and cultivating like corn. Harvest when nearly ripe with a grain or row binder and cure in the shock like grain. The seed may be threshed with an ordinary grain thresher, taking care to regulate the air blast. Sudan Grass crosses with Sorghum readily, so should not be grown near Sorghum if the seed is to be saved.

english blue grass or MEADOW FESCUE

A very useful grass for permanent pasture. Makes excellent hay, succeeds even in poor soil; will endure severe freezing. Cattle thrive on it, whether it is dry or green.

KENTUCKY BLUE GRASS

Will outlive any other grasses for pasture or lawn, but should not

20 TONS ALFALFA ON 5 ACRES

Dear Sirs: We have five acres of alfalfa that has cut twenty tons of hay each year for two years. Bought the seed of your company and it is on non-irrigated land. We like your seed fine and expect to send for some more.

CHAS. A. BROWN, Ainsworth, Neb.



MEADOW FESCUE

be cut or pastured too closely in extremely hot, dry weather. The seed is slow in germinating, therefore, it is advisable of plant with other varieties of quicker growing habits. Makes a sweet and nutritious pasture for all stock.

RYE GRASS

A very quick growing grass and for that reason makes an excellent pasture. Thrives on rich, moist land where from three to four cuttings may be made in a season. Will stand close pasturage.

RED TOP

As a hay crop Red Top is next to Timothy in importance. It will do the best on rather moist soil, but will thrive on most any soil. It is a good variety to sow with Timothy or Clover for meadow or pasture, and is more permanent than either of the other two.

SAVED \$10.00 ON ORDER

Dear Sirs: Will say that timothy and clover I bought of you was A No. 1, also the Sudan made fine crop; saved \$10.00 on the order. Will boost Standard Seed Company first and last.

JOHN R. FIELD, Houstonia, Mo.



ORCHARD GRASS

PERMANENT PASTURE MIXTURE

This is a blend of the most desirable grasses in proper proportions with the object of insuring not only abundant pasture, but maintaining same for the longest possible time.

There is an accurate Field Seed Reference Table on Back Cover of this book, which is worth preserving.

ORCHARD GRASS

Is an early fibrous rooted perennial. Its rapid growth makes it very desirable for pasture. Withstands droughts better than most grasses. Will thrive in the shade such as in orchards and lanes. When closely cropped it grows up quickly, and is ready for grazing again in 10 to 12 days.

GOT CHOICE GRADE FOR PRICE OF PRIME GRADE

Dear Sirs: The seed I got from you came up well and I got choice from you for what the merchants wanted for prime seed and return sacks to them. I saved the difference between prime and choice seeds in buying from you.

C. E. BALLARD, Kingsville, Mo.

BROME GRASS

(BROMUS INERMIS)

Brome Grass may be sown either in the spring or fall. It grows naturally in dry, gravelly places, on river banks and hills, along borders of woods, etc., and more rarely, in meadows.

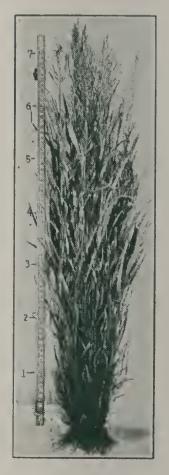
Brome Grass does not require a heavy, good soil, but thrives on loose and comparatively poor land where more valuable grasses would make a poor stand. Although it succeeds in medium, wet soil, it is highly prized on account of its drought-resisting qualities; in dry summers it produces more green feed than any other grass.

Like most other perennial grasses, Brome Grass grows rather slowly the year it is sown. The second year the crop is heavy and the third year it usually reaches its maximum.

Its ability to furnish green feed, even in a hot, dry summer, makes it valuable for pasture, although its nutritive value cannot be compared with that of Kentucky Blue Grass, for instance. Its indifference to the tramping of cattle and sheep makes it especially important in sandy and gravelly pastures.

Fourteen to twenty pounds should be sown per acre.

All LEGUMES Should Be Innoculated—See Page 18.



BROMUS INERMIS

CANE SEED

An excellent soiling crop furnishing a succulent feed for milch cows

A large yielding fodder crop

As a soiling crop, sorghum will always prove of great value, since at least two crops can be obtained from one sowing. Milch cows are exceptionally fond of sorghum. It is excellent for milk production and a given area furnishes a large quantity of succulent feed. An acre of sorghum yielding 15 tons of green forage would feed 50 head of stock for 10 days. It should be fed sparingly at first, to avoid bloating. As a fodder crop it furnishes an enormous amount of feed. Sorghum outyields fodder corn, producing a richer and more nutritious feed of greater value. Thus it will be seen that utilized as a pasture, as a soiling and fodder crop, it may be made to furnish feed nearly the whole year round.

BLACK AMBER

The old standard variety especially adapted to the states north of Kansas where early maturity is of importance.

HEGARI SORGO

Hegari Sargo is a pedigreed selection from a cross between Blackhull Kaffir and sourless Sorgo. The advantage of Hegari over Kan-



AMBER CANE

sas Orange Cane lies in two important characters, i. e., stiff stalks and white, palatable grain.

ORANGE

A heavy yielding variety grown for forage, silage, seed, and syrup. It is rather late in maturing seed as it takes from 100 to 110 days.

RED TOP or SUMAC

Grown very extensively in Texas, Oklahoma and southwestern Kansas for fodder. The plants are stocky, very leafy, and sweet. The seeds are small and therefore a bushel will plant a large acreage.

GETS FINE STAND OF ALFALFA FROM OUR SEED

If I can send you orders for alfalfa this fall, I will do all I can for you as I got an extra good stand from the seed I bought from you last fall. The best I have ever seen in this country. F. A. WALKER,

Hydro, Okla.



SIBERIAN MILLETS

A very fine variety of millet, also hailing from Russia. Unusually early, extremely hardy and with-stands drought. The plant shows a remarkable stooling habit, as many as 30 to 40 stalks frequently grown from one seed.

PROSO or HOG MILLET

The demand for Proso Millet seems to be increasing each year. It is generally used as a grain crop for poultry purposes. It is also eaten quite readily by all kinds of live stock. We suggest sowing most any time after danger of frost is over. It requires about 70 days to mature. Sow about 35 pounds per acre.

Exactly as Recommended savs CECIL LAWRENCE

I ordered from you last year and certainly did find your seeds exactly as recommended. They were No. 1 seed.

CECIL LAWRENCE, Ravendon, Ark.

MILLETS

One of the best "catch crops",-will give fair returns under the most adverse conditions.

Millets today are occupying a much more important place in farm economy tha never. They constitute one of the bset "catch crops" we have. Can be sown later than almost anything else and will give very fair returns under the most adverse conditions. We strongly recommend every farmer to include a quantity of Millet with his order, so as to have some of the seed on hand in case an opportunity offers where it can be used profitably.

GERMAN MILLET

Under favorable conditions the German Millet will undoubtedly produce the heaviest yield of hay per acre. It grows very densely and is an excellent cleaning crop.

Dear Sirs:

I purchased seed from you last year and it was all I expected of any seed. -E. A. Sheehan, Loretto, Pa.

Dear Sirs:

I have secured my grass seed from you for several years, and find that the name, Standard Seed Co. is a guarantee of quality at the lowest possible prices. Always have Standard sible prices. Always buy Standard seed because they give highest germination. — Harrison Yancey, Arcadia,



KAFFIR CORN

Makes excellent fodder either green or cured

Stalks will grow 4 to 5 feet high, are very leafy and highly relished by all stock. If grown for seed, will generally yield from 35 to 50 bushels per acre. If grown for grain, sow in rows of 3 feet apart, 3 to 5 pounds of seed per acre, and for fodder, broadcast at the rate of 1½ to 2 bushels per acre.

RED KAFFIR

Taller than the white. Stalks are more slender, but juicy and leafy. The seed is small, rather hard and brittle. Does well on poor land and ripens a little earlier than the white.

Dwarf Black Hull WHITE KAFFIR

Has several advantages over the Standard. Being a dwarf, it is better adapted to withstand dry weather and, moreover, can be harvested with a grain header.

GROHOMA

The New Wonder Grain

As a forage crop it is superior to Kaffir, Milo Maize or Feterita. It is a sure crop on upland or low-land—wet or dry season.

Grohoma has been produced from seed for the last six years. It is a combination of Kaffir and Seeded Ribbon Cane, producing a larger head and a larger grain than Kaffir, together with a stalk and foliage far superior to any Sorghum ever produced.

Grohoma has a deep root system. After the main head matures, it shoots from 1 to 10 branch heads from the joints, which mature in from 10 to 20 days after main head.



If the stalks are then cut, the plant will stool and then produce another set of stalks and a branch head, if the season permits.

It should be planted as soon as safe from frost. It is a row crop. You can't afford to be without it. Sow about 5 to 10 lbs. of seed per acre.

FETERITA

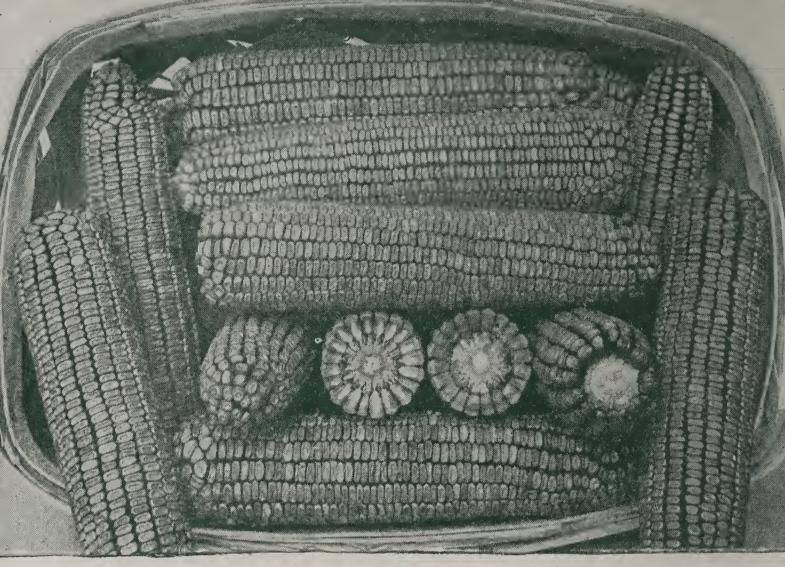
This is a comparatively new grain, belonging to the sorghum family, and introduced from Africa by the United States Department of Agriculture, has made rapid progress. A wonderful drought resister, early and heavy yielding, and seems to be immune to attacks of insect pests. If grown for the production of grain, should be sown in rows at the rate of 3 to 8 pounds per acre and cultivated, while if sown for fodder, should be broadcast at the rate of 1½ to 2 bushels per acre.

SAVED \$9.75 ON ONE BUSHEL OF SEED

I bought one bushel of prime Alsike of you this spring and every seed must have grown. I never saw a better stand. Comparing other prices, I have saved \$9.75 on this one bushel of seed. WM. LINVILLE,

Russell, Iowa

KANSAS CITY, MISSOURI



SEED CORN

Corn has repeatedly demonstrated its value as a sure crop; be sure to plant a good acreage next season and use only the reliable and tested Standard Brand. Seed Corn is a specialty with us. We handle practically all major varieties and every lot is tested after being shelled and before shipment.

YELLOW VARIETIES

REID'S YELLOW DENT. The standard yellow of America. Shells 88% grain. An immense yielder and can always be depended on for big yield.

PRIDE OF THE NORTH. 84-Day Yellow Dent. Bright red cob, ears medium size and deep kernel. Many of the stalks have two good ears.

IMPROVED LEAMING. (90 days.) This is one of the earliest Yellow Dent corns in cultivation,

ripening in 90 to 100 days from planting.

IOWA GOLD MINE. (90 days.) It is early, ears of good size and symmetrical; color bright golden yellow, grains very deep, cob small.

GOLDEN BEAUTY. (120 days.) Surpasses all in size and beauty of grain. Ears are of perfect shape, 10 to 14 straight rows, remarkable in size. The richness of color and fine quality of grain make it vastly superior for grinding into meal.

WHITE VARIETIES

BOONE COUNTY WHITE. Boone County is a very large, white corn, something like Silver Mine, but larger and later in maturing. Matures in 110 to 120 days.

IOWA SILVER MINE. The National White Corn. A remarkable

drought resister and under adverse conditions seems to pull through and make a crop where other varieties fail. Silver Mine is deep grained, pure white, roughtopped, with a small, white cob. Ears run from 9 to 12 inches long.

WHITE VARIETIES .-- Continued

ST. CHARLES WHITE. The St. Charles White is a pure variety of white corn set on a red cob, and this corn appears to make a finer and better grade for milling purposes and for corn meal than almost any other sort. The ears are usually 8 to 10 inches long, 16 to 18 rows of deep, broad kernels being rounding. The stalks grow

7 to 8 feet high and have broad, succulent blades, thus making it very desirable for fodder or for ensilage purposes.

IMPROVED HICKORY KING. Largest grains of any white variety. Matures early and very productive. Ears set low, are of large size, well filled, very deep grained. Produces well, even on light land.

RED VARIETIES

BLOODY BUTCHER. (100 days.) A better drought resister than any other variety. Perfect shaped, long ears; grain is deep red, occasionally appearing with yellow tip. Type not entirely fixed.

squaw corn. A pronounced dwarf variety which resists drought extremely well. Early. Has small ears and kernels are

blue or white and blue. Fine for western Kansas, Oklahoma and Texas.

CALICO. (10 days.) The old fashioned red, white and yellow, originally obtained by breeding together vigorous red, white and yellow types, the kernels showing stripes of all three colors. Large ears, deep grains and small cobs.

A NEW WINTER BARLEY

The new barley has been named Missouri Early Beardless. It is a hooded type with no awns to interfere with feeding the straw or with feeding the grain off when it matures, if that is desired or is advisable. Development of this Barley offers several important advantages. It will permit production of twice the feed equivalent of corn on the medium lands.

It comes off 5 weeks ahead of oats, 4 weeks ahead of winter wheat and at least 2 weeks ahead of ordinary varieties of Winter Barley.

It matures early enough to plant the land back to soy beans for hay which will produce another feed equivalent of 25 to 30 bushels of corn in the same season. Barley may be seeded again after the soy beans are removed.

Another advantage of the continuous cropping is that the land is covered practically the year

around. Chinch bugs are fond of barley, but this variety matures before the period of heavy infestation and likewise before the customary summer drouth. Seeding should be done the last of September or first part of October. The rate is about 1½ to 2 bushels per acre.

In a normal year it will be ready for pasture in about 4 weeks after seeding.

Several reasons why Barley will not survive: Barley which was not pastured down, jointed and was frozen out. Another cause of failure was too heavy grazing. Where Barley was eaten into the ground it did not survive. It should go into the winter with 3 inches of growth. On the other hand 7 inches of growth at the beginning of winter will be fatal.

(Our stocks will not be available until next June.)

KANSAS CITY, MISSOURI

Rape... Buckwheat



RAPE

Rape can be put to quite a number of uses. It may be sown alone as a spring crop to provide early It may be sown with pasture. spring grain to provide fall pasture after the grain is cut. As it is a common practice to drag or weed our grain crops after they are up, the sowing of rape at this time can be easily done. Rape may also be sown just before the last cultivation of corn to provide fall feed and increases the yield of feed per acre, or Rape may be sown with fall rye to provide fall pasture.

SATISFACTORY FOR FOUR YEARS

Dear Sirs: I have been buying Clover and Grass and Alfalfa seed from you for the past four years. They have given satisfaction in every way. I get four cuttings of Alfalfa a season and the yield is fine. I cut fifteen tons of Alfalfa hay from thirteen acres the first cutting last spring. The Timothy and Clover was as fine as I ever saw. I always have a good word for your seed. I saved 25% to 40% on the price of seed by ordering from you.

H. B. HOLT,

Crocker, Mo.

DWARF ESSEX RAPE

This plant, which is related to the rutabaga family is one of the very best forage plants for pasturing cattle, hogs, or sheep, as well as for silo filling. Thrives best in low,

moist soil, such as slough, lake bed or a coulee bottom. In such places it will produce a tremendous quantity of feed, growing out as fast as it is eaten off.

BUCKWHEAT

An excellent catch-crop, develops very rapidly. Useful either for hay or if allowed to mature gives an excellent grain crop which is much in demand for both poultry feeding and household use.

The best variety for the Northwest. Produces its seed earlier, resists drought and is very dependable. While not quite so early as Japanese, is preferred by millers as it makes a whiter, better and more nutritious flour. A nice variety to sow where bees are kept.

The Alfalfa seed bought of you is growing fine and have a nice stand.

W. E. HIATT, Unionville, Iowa

Route 3

IT PAYS TO INOCULATE

4 Reasons

Why You Should Use

Dickinson's BACTERIA

- Insures Better Stands. The legume crops require plenty of nitrogen in their early growth. Inoculation makes an ample supply available.
- 2 Insures Bigger Crops. Inoculation by increasing available plant food promotes the most vigorous growth and produces bigger crops.
- 3 Increases Value of Crop for Feeding. By feeding nitrogen to plants, their protein content and, hence, their feed value, is greatly increased.
- Adds Fertility to Soil. Inoculation provides plenty of nitrogen for the crop and, when it is turned under, adds to the soil an average of 100 lbs. of nitrogen per acre.

Much money has been wasted in the purchase of seed because the land upon which it was seeded did not have the proper inoculation. It is a serious mistake for any farmer to go to the expense of buying seed and preparing the soil, and then fail to provide the proper inoculation.

Seed planted on soils that have grown legumes successfully within recent years, does not need to be inoculated, but very often it is sown upon soil that hasn't grown legumes for years, or perhaps never. The cost of inoculating seed is so small that no one is justified in trusting to luck and assuming that the soil contains the proper bacteria for growing alfalfa.

If the soil is very rich in nitrogen, the crop will do well for a while, but sooner or later it will begin to turn yellow, which indicates a shortage of nitrogen. Therefore it winterkills easily and instead of being a co-operator is a parasite living on the richness of the land. To go to the expense of preparing a field, perhaps liming it in order to make it sweet that the nitrogen-gathering germs can live, purchasing seed, and then failing to make sure that the soil contains the nitrogen-gathering bacteria, exhibits a lack of business judgment.

The commercial products are the easiest, cheapest, and best way to provide this inoculation.

Prices Quoted on Page No. 18



Uneven seeding is wasteful. The "Cyclone" will sow many acres per hour, any amount per acre. Does the work quickly and SAVES LABOR.

> Many hundred thousands of farmers in America, Canada, Europe and other countries have relied on it for sowing clover, timothy, alfalfa, lespedeza, sudan grass, oats, wheat or any other seed that is sown broadcast.

CONTINUES TO LEAD THE FIELD AFTER



SAVES SEEDS

CONSTRUCTION—Its well known double feed insures a uniform flow of seed. Sloped Feed Board keeps hopper properly filled. Feed Adjust-

POSTPAID

Via Freight Collect, \$2.00

ment is automatic and starts or stops flow of seed instantly. Distributing Wheel scatters Throws seed evenly. equal amounts to equal distances on each side of operator.



The "HORN" Seed Sower



The tube is made in four sections or joints—they assemble like a stove pipe and not like a telescope.

POSTPAID

Via Freight Collect, 90c

Will sow perfectly all smooth seeds like alfalfa, clover, timothy, lespedeza, etc., any desired amount per acre and you can rely on this perfect seed gauge. 90c, freight collect.

Easily operated—Guaranteed

COMBE PRINTING CO., Horticultural Printers, St. Joseph, Mo.